

# Work Order ID 64778

Friday, December 17, 2010 7:51:08 AM



Page 1

Item ID:	D2144	Accept		Setup	Start	
Revision ID:					Stop	
Item Name:	Hinge Bracket					
Start Date:	12/16/2010	Start Qty:	20.00		Cust Item ID:	
Required Date:	1/19/2011	Req'd Qty:	20.00		Customer:	
Reference:						

Approvals:	Process Plan:	<u>PL</u>	Date:	<u>12-17</u>	Tooling:		Date:		Run	Start	
	QC:		Date:		SPC (Y/N):		Date:			Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
<b>Draw Nbr</b>	<b>Revision Nbr</b>								
D2144	Rev D								

100		0.00							
	FLOW WATER JET								
Waterjet	Memo	0.00							
FLOW CNC Waterjet	1-Cut as per Dwg D2144 <input type="checkbox"/> Dwg Rev: <u>D</u> <input type="checkbox"/> Prog Rev: <u>D</u> <input type="checkbox"/> 2-								
304 .063	Debur if necessary								

RB11-1-3

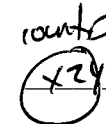


110		0.00							
	QC2- Inspect parts off machine FAI/FAIB								
QC	Memo	0.00							
Quality Control									

RB11-1-3

120		0.00							
	QC8- Inspect parts - second check								
QC	Memo	0.00							
Quality Control									

11/01/03



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

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Page 2

Item ID: D2144

Accept



Setup Start



Revision ID:

Stop



Item Name: Hinge Bracket

Start Date: 12/16/2010 Start Qty: 20.00



Cust Item ID:

Required Date: 1/19/2011 Req'd Qty: 20.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Small Fab	0.00							
	Small Fab								
Small Fab	Memo	0.00							
Small Fab	Deburr if necessary								
140	NC BRAKE	0.00							
	Brake NC								
Brake NC	Memo	0.00							
Brake NC	Form as per Dwg D2144Rev: <u>D</u>								
150	QC5- Inspect part completeness to step on W/O	0.00							
	QC								
Quality Control	Memo	0.00							

*v/w*

*S 11/01/12*

*(24)*

*Selock 13*

*counts*  
*(424)*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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Page 3

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Reference:				

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run Start	
	QC:	Date:	SPC (Y/N):	Date:	Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160 	Large Fab	0.00				24	0		
Large Fab	Memo	0.00							
Large Fab	1- Weld corner-as per Dwg D2144 & QSI 004□2- Grind flush								
170 	QC9- Inspect visual per QSI004- Fusion Welds	0.00							
QC	Memo	0.00				24	0		
Quality Control									
180 	QC5- Inspect part completeness to step on W/O	0.00							
QC	Memo	0.00							
Quality Control									

*Pl 11.01.14*  
*BE*  
*Pl 11.01.14*

*count*  
*(724)*

*Sub 11.14*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_






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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			



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# Work Order ID 64778

Friday, December 17, 2010 7:51:08 AM

Page 4

Item ID:	D2144	Accept		Setup	Start	
Revision ID:						
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Start Date:	12/16/2010	Start Qty: 20.00		Cust Item ID:		
Required Date:	1/19/2011	Req'd Qty: 20.00		Customer:		
Reference:						

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	
	QC:	Date:	SPC (Y/N):	Date:		Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190  Powdercoat Powder Coating	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum <i>M115951.</i> Memo START TIME: <i>11:30</i> <i>4000</i> <input type="checkbox"/> FINISH TIME: <i>12:00</i> <input type="checkbox"/> OVEN TEMPERATURE:	0.00 0.00				<i>24</i>	<i>BR</i>	<i>11-01-17.</i>	
200  QC Quality Control	QC3- Inspect Part Finish  Memo	0.00 0.00		<i>=&gt; M</i>	<i>11/01/17</i>	<i>21</i>	<i>8</i>		
210  Packaging Packaging	Identify as per dwg & Stock Location: <i>198</i>  Memo	0.00 0.00				<i>11/11/10</i>	<i>24</i>	<i>8</i>	

W/O:		WORK ORDER CHANGES					
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Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



**Work Order ID 64778**

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Item ID: D2144

Accept

Setup Start

Revision ID:

Stop

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Start Date: 12/16/2010 Start Qty: 20.00

Required Date: 1/19/2011 Req'd Qty: 20.00

Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

220

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

11/01/18 JF  
me  
11-01-18

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries

# Picklist Print

Friday, December 17, 2010 7:51:12 AM

Page 1

Work Order ID: 64778

Parent Item: D2144

Parent Item Name: Hinge Bracket



Start Date: 12/16/2010

Required Date: 1/19/2011

Start Qty: 20.00

Required Qty: 20.00

Comments:

IPP: D04.05.06 Reformat KJ/RF

IPP Rev:E Now on Waterjet 06-10-15 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

M304S16GA

Purchased

No

120

sf

86.4000

0.0945

1.89

23



11-1-3

304/316 Sheet .063

Location

Loc Qty

Loc Code

MAT

86.4

111323

0

115953

86.4

115953

24

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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**NOTE:** Date & initial all entries

<b>DART AEROSPACE LTD</b>		<b>Work Order:</b>	44778
<b>Description:</b> Hinge Bracket		<b>Part Number:</b>	D2144
<b>Inspection Dwg:</b> D2144	<b>Rev:</b> D	<b>Page 1 of 1</b>	

### FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
3.381	+/-0.010	3.379	X		V HB02	
3.022	+/-0.010	3.021	X		V	
2.468	+/-0.010	2.471	X		V	
1.913	+/-0.010	1.910	X		V	
1.555	+/-0.010	1.555	X		V	
4.126	+/-0.010	4.128	X		V	
3.465	+/-0.010	3.458	X		V	
0.340	+/-0.010	0.342	X		V	
0.625	+/-0.010	0.629	X		V	
1.000	+/-0.010	1.001	X		V	
1.083	+/-0.010	1.087	X		V	
1.660	+/-0.010	1.663	X		V	
2.312	+/-0.010	2.307	X		V	
2.844	+/-0.010	2.844	X		V	
3.294	+/-0.010	3.289	X		V	
Ø0.257	+0.006/-0.001	0.257	X		V	
Ø0.171	+0.005/-0.001	0.173	X		V	
Ø0.320	+0.006/-0.001	0.321	X		V	
0.354	+/-0.010	0.354	X		V	
0.063	+/-0.010	0.059	X		V	

<b>Measured by:</b> RB	<b>Audited by:</b> S	<b>Prototype Approval:</b>	N/A
<b>Date:</b> 16-1-3	<b>Date:</b> 11/01/03	<b>Date:</b>	N/A

Rev	Date	Change	Revised by	Approved
A	07.05.31	New Issue	KJ/JLM	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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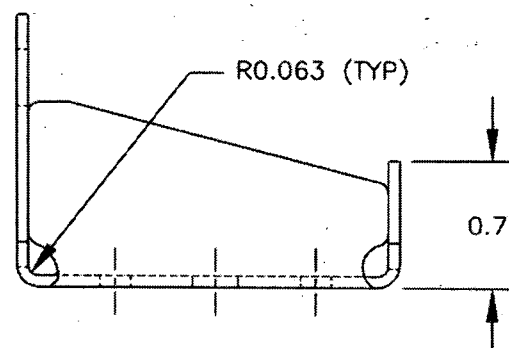
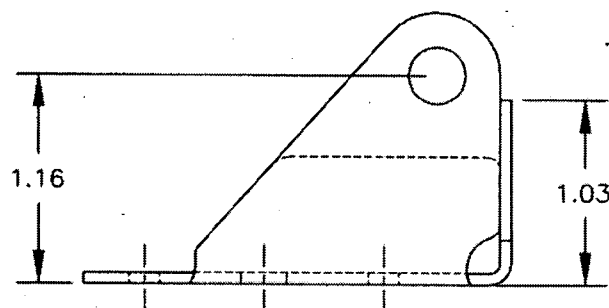
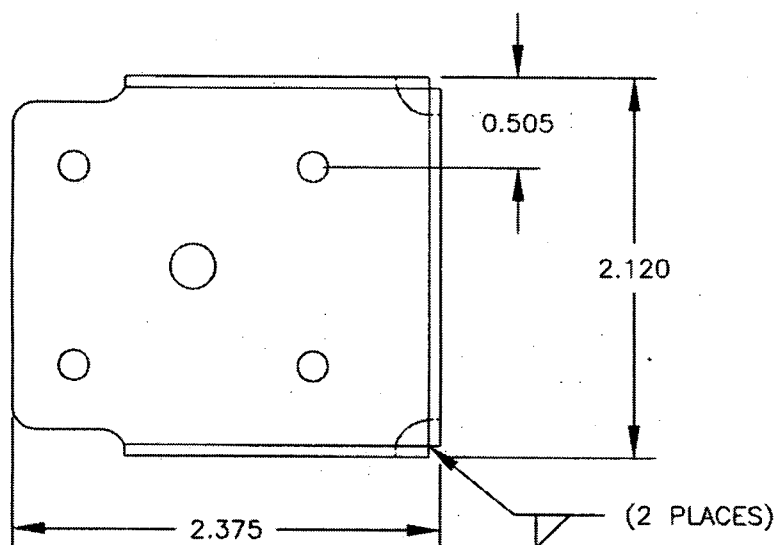
**NOTE:** Date & initial all entries



RELEASED  
48.10.15 KE

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 64778

BS101217



FINISH: POWDER COAT GLOSS WHITE (4.3.5.1) PER DART QSI 005 4.3  
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED  
WELD PER DART QSI 004

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	REV. D
BW	KE		
CHECKED	APPROVED	DRAWING NO.	SHEET 1 OF 2
MB	KE	D2144	
DATE	TITLE	SCALE	
98.10.08	HINGE BRACKET	1:1	
A	95.03.17	NEW ISSUE	
C	96.06.05	FLAT PATTERN LAYOUT ADDED	
D	98.10.08	UPDATED DIMS AFTER BEND (TSR A917)	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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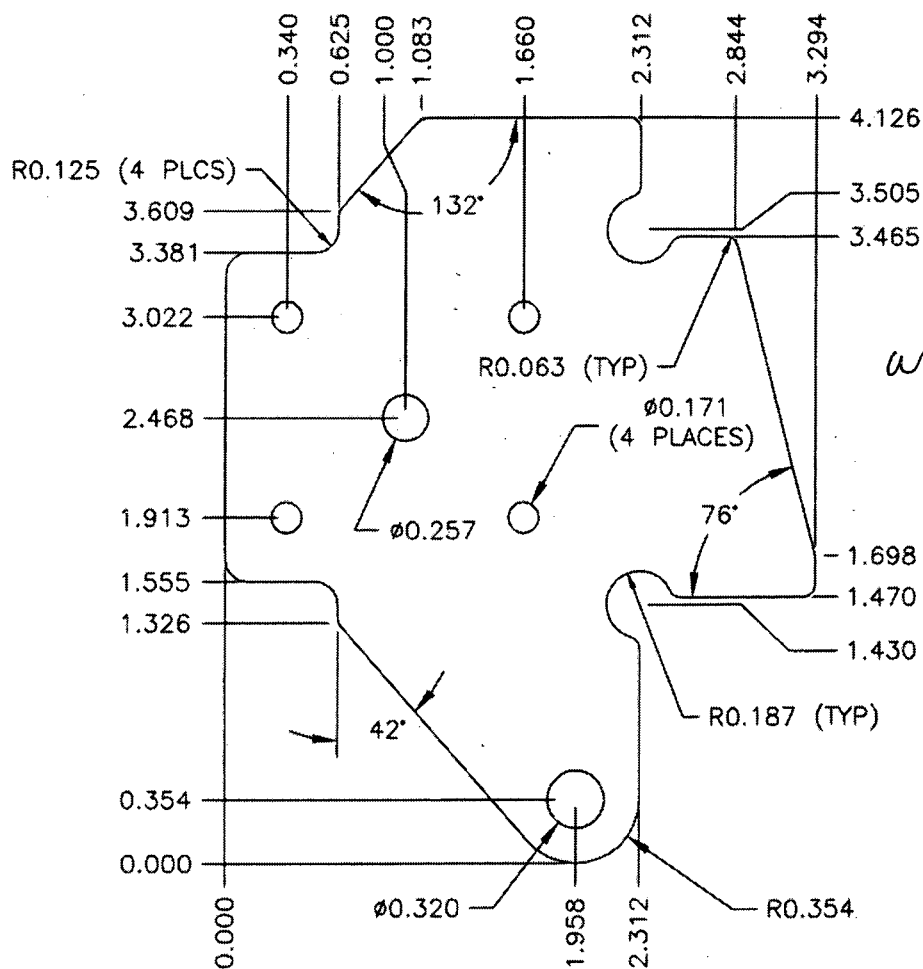
**NOTE:** Date & initial all entries





DESIGN BW	DRAWN BY KE	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED RJA	APPROVED [Signature]	DRAWING NO. D2144	REV. D SHEET 2 OF 2
DATE 98.10.08	TITLE HINGE BRACKET		SCALE 1:1

RELEASED  
98 10.15 KB



### D2144 FLAT PATTERN

MATERIAL: AISI 304/316-2B SS, 0.063 THICK  
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED  
ALL DIMENSIONS ARE IN INCHES

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries